

ABSTRACT

[00034] An enhanced frame structure for a system for transmitting and receiving digital television signals as a plurality of frames and method of using same. The enhanced frame structure contains an initial frame structure containing at least two fields, each of said fields having a field synchronization segment followed by a plurality of initial frame structure data segments and a first or more modified frame structures containing at least two fields. Each of said fields has a field synchronization segment followed by at least a plurality of first modified frame structure data segments that is less than the plurality of initial frame structure data segments. The method includes the steps of conducting a site survey of the area to receive said signals, selecting an appropriate training sequence signal mode of the enhanced frame structure selected from the group consisting of a mode for an initial frame structure and a mode for a first or more modified frame structure, programming a system for broadcasting said signals with said selected training sequence signal mode, operating said system to broadcast said signals, conducting a field test and adjusting the training sequence signal mode according to the results of the field test.